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\* \* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page for STN Seminar Schedule - N. America  
NEWS 2 JUL 02 LMEDLINE coverage updated  
NEWS 3 JUL 02 SCISEARCH enhanced with complete author names  
NEWS 4 JUL 02 CHEMCATS accession numbers revised  
NEWS 5 JUL 02 CA/Caplus enhanced with utility model patents from China  
NEWS 6 JUL 16 CAplus enhanced with French and German abstracts  
NEWS 7 JUL 18 CA/Caplus patent coverage enhanced  
NEWS 8 JUL 26 USPAFULL/USPAT2 enhanced with IPC reclassification  
NEWS 9 JUL 30 USGENE now available on STN  
NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags  
NEWS 11 AUG 06 FSTA enhanced with new thesaurus edition  
NEWS 12 AUG 13 CA/Caplus enhanced with additional kind codes for granted patents  
NEWS 13 AUG 20 CA/Caplus enhanced with CAS indexing in pre-1907 records  
NEWS 14 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB  
NEWS 15 AUG 27 USPATOLD now available on STN  
NEWS 16 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data  
NEWS 17 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index  
NEWS 18 SEP 13 FORIS renamed to SOFIS  
NEWS 19 SEP 13 INPADOCDB enhanced with monthly SDI frequency  
NEWS 20 SEP 17 CA/Caplus enhanced with printed CA page images from 1967-1998  
NEWS 21 SEP 17 CAplus coverage extended to include traditional medicine patents  
NEWS 22 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements  
NEWS 23 OCT 02 CA/Caplus enhanced with pre-1907 records from Chemisches Zentralblatt  
NEWS 24 OCT 19 BEILSTEIN updated with new compounds  
  
NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,  
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 06:03:58 ON 22 OCT 2007

FILE 'REGISTRY' ENTERED AT 06:04:10 ON 22 OCT 2007  
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STRUCTURE FILE UPDATES: 19 OCT 2007 HIGHEST RN 951118-42-6  
DICTIONARY FILE UPDATES: 19 OCT 2007 HIGHEST RN 951118-42-6

New CAS Information Use Policies; enter HELP USAGE TERMS for details.

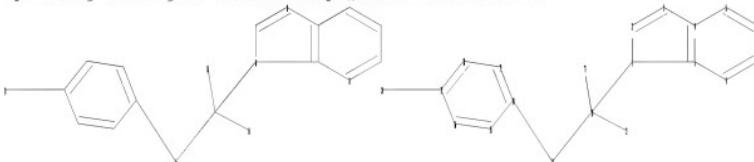
TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stn/gen/stndoc/properties.html>

=>  
Uploading C:\Program Files\Stnexp\Queries\10573274.str



```

chain nodes :
10 12 13 20 21
ring nodes :
1 2 3 4 5 6 7 8 9 14 15 16 17 18 19
chain bonds :
1-10 10-13 10-12 10-21 14-21 17-20
ring bonds :
1-2 1-5 2-3 3-4 4-5 4-6 5-9 6-7 7-8 8-9 14-19 14-15 15-16 16-17 17-18
18-19

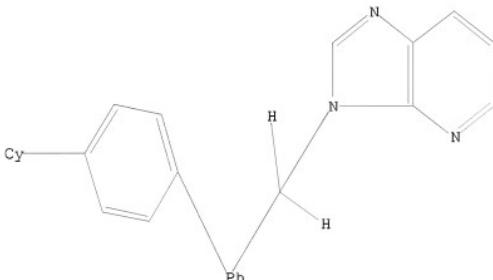
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exact/norm bonds :  
1-2 1-5 1-10 2-3 3-4 17-20  
exact bonds :  
10-13 10-12 10-21 14-21  
normalized bonds :  
4-5 4-6 5-9 6-7 7-8 8-9 14-19 14-15 15-16 16-17 17-18 18-19  
isolated ring systems :  
containing 1 : 14 :

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS  
12:CLASS 13:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom  
21:CLASS

L1        STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1            STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11  
SAMPLE SEARCH INITIATED 06:04:27 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED -            0 TO ITERATE  
100.0% PROCESSED            0 ITERATIONS            0 ANSWERS  
SEARCH TIME: 00.00.01  
FULL FILE PROJECTIONS:    ONLINE    \*\*COMPLETE\*\*  
                            BATCH     \*\*COMPLETE\*\*  
PROJECTED ITERATIONS:      0 TO            0  
PROJECTED ANSWERS:          0 TO            0

L2        0 SEA SSS SAM L1

=> s 11 full  
FULL SEARCH INITIATED 06:04:31 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED -            6 TO ITERATE

100.0% PROCESSED 6 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

Connection closed by remote host

## Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: SSPTANXR1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 JAN 02 Web Page for STN Seminar Schedule - N. America  
NEWS 2 JAN 02 STN pricing information for 2008 now available  
NEWS 3 JAN 16 CAS patent coverage enhanced to include exemplified prophetic substances  
NEWS 4 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats  
NEWS 5 JAN 28 MARPAT searching enhanced  
NEWS 6 JAN 28 USGENE now provides USPTO sequence data within 3 days of publication  
NEWS 7 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment  
NEWS 8 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements  
NEWS 9 FEB 08 STN Express, Version 8.3, now available  
NEWS 10 FEB 20 PCI now available as a replacement to DPCI  
NEWS 11 FEB 25 IFIREF reloaded with enhancements  
NEWS 12 FEB 25 IMSPRODUCT reloaded with enhancements  
NEWS 13 FEB 29 WPINDEX/WPIADS/WPIX enhanced with ECLA and current U.S. National Patent Classification  
NEWS 14 MAR 31 IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats  
NEWS 15 MAR 31 CAS REGISTRY enhanced with additional experimental spectra  
NEWS 16 MAR 31 CA/CAplus and CASREACT patent number format for U.S. applications updated  
NEWS 17 MAR 31 LPCI now available as a replacement to LDPCI  
NEWS 18 MAR 31 EMBASE, EMBAL, and LEMBASE reloaded with enhancements  
NEWS 19 APR 04 STN AnaVist, Version 1, to be discontinued  
NEWS 20 APR 15 WPIDS, WPINDEX, and WPIX enhanced with new predefined bit display formats

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,  
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

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**NEWS LOGIN** Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 10:01:34 ON 17 APR 2008

=> file reg  
COST IN U.S. DOLLARS  
SINCE FILE ENTRY SESSION  
0.21 0.21  
FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 10:01:42 ON 17 APR 2008  
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STRUCTURE FILE UPDATES: 15 APR 2008 HIGHEST RN 1015083-77-8  
DICTIONARY FILE UPDATES: 15 APR 2008 HIGHEST RN 1015083-77-8

New CAS Information Use Policies, enter HELP USAGE TERMS for details.

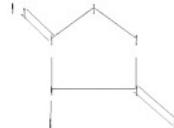
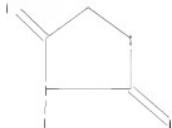
TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stnqgen/stndoc/properties.html>

=>  
Uploading C:\Program Files\Stnexp\Queries\10573274d.str



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chain nodes :
6 7 8 9
ring nodes :
1 2 3 4 5
chain bonds :
3-6 4-8 5-7

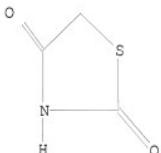
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ring bonds :  
1-2 1-5 2-3 3-4 4-5  
exact/norm bonds :  
1-2 1-5 2-3 3-4 3-6 4-5  
exact bonds :  
4-8 5-7

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS

L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SEARCH INITIATED 10:02:04 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 380 TO ITERATE

100.0% PROCESSED 380 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 6431 TO 8769  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 full  
FULL SEARCH INITIATED 10:02:08 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 7275 TO ITERATE

100.0% PROCESSED 7275 ITERATIONS 10 ANSWERS  
SEARCH TIME: 00.00.01

L3 10 SEA SSS FUL L1

=> file caplus  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
FULL ESTIMATED COST ENTRY SESSION  
178.36 178.57

FILE 'CAPLUS' ENTERED AT 10:02:13 ON 17 APR 2008  
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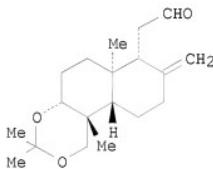
FILE COVERS 1907 - 17 Apr 2008 VOL 148 ISS 16  
FILE LAST UPDATED: 16 Apr 2008 (20080416/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.  
They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 13 full  
L4 5 L3  
=> d ibib abs hitstr tot

L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:445135 CAPLUS  
 DOCUMENT NUMBER: 141:140629  
 TITLE: Novel routes for the generation of structurally diverse labdane diterpenes from andrographolide  
 AUTHOR(S): Nanduri, Srinivas; Nyavanandi, Vijay Kumar;  
 Thunuguntla, Siva Sanjeeva Rao; Velisocju, Mahendar;  
 Kasu, Sridevi; Rajagopal, Sriram; Kumar, R. Ajaya;  
 Rajagopalan, R.; Iqbal, Javed  
 CORPORATE SOURCE: Discovery Chemistry, Discovery Research, Dr. Reddy's Laboratories Ltd., Miyapur, Hyderabad, 500 049, India  
 SOURCE: Tetrahedron Letters (2004), 45(25), 4883-4886  
 CODEN: TELEAY; ISSN: 0040-4039  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 141:140629  
 GI



I

**AB** Andrographolide, the major constituent of the Indian medicinal plant *Andrographis paniculata* (Acanthaceae) was converted into the key intermediate I by selective oxidative degradation of the C-12,13 olefin bond. The aldehyde functional group present in I has been utilized for synthesizing a number of structurally diverse labdane diterpenes. Synthesis and *in vitro* cytotoxic activity results of the compds. prepared are discussed.

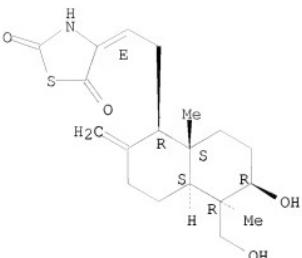
**IT** 727723-08-2P

**RL:** PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and anticancer activity of labdane diterpenes)

**RN** 727723-08-2 CAPLUS

**CN** 2,5-Thiazolidinedione, 4-[2-[(1R,4aS,5R,6R,8aS)-decahydro-6-hydroxy-5-(hydroxymethyl)-5,8a-dimethyl-2-methylene-1-naphthalenyl]ethylidene]-, (4E)- (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



REFERENCE COUNT:

13

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:322523 CAPLUS

DOCUMENT NUMBER: 125:58379

TITLE: Gas-phase elimination reactions of 4-substituted  
2-alkoxythiazoline-5-ones

AUTHOR(S): Al-Awadi, Nouria; Elnagdi, Mohamed H.

CORPORATE SOURCE: Chem. Dep., Kuwait Univ., Safat, 13060, Kuwait

SOURCE: Heteroatom Chemistry (1996), 7(3), 183-186

CODEN: HETCE8; ISSN: 1042-7163

PUBLISHER: Wiley

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



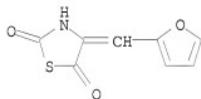
AB Gas-phase elimination of 4-substituted 2-alkoxythiazoline-5-ones I ( $R = H$ , Me,  $X = PhNHN$ , 2-furylmethylene) have been studied. These compds. eliminate via a six-membered transition state to produce 4-substituted thiazolidine-2,5-diones II. These eliminations are unimol. first-order reactions. Utilization of this thermolysis reaction in the synthesis of new 4-substituted thiazolidine-2,5-diones is considered. Addnl. mechanistic information was obtained by comparing the kinetic data for thermal elimination reactions of these compds. with that of 1-ethoxythiazole.

IT 178321-12-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(kinetics of elimination of alkoxythiazolinones to thiazolidinediones)

RN 178321-12-5 CAPLUS

CN 2,5-Thiazolidinedione, 4-(2-furylmethylene)- (CA INDEX NAME)



ACCESSION NUMBER: 1994:558118 CAPLUS

DOCUMENT NUMBER: 121:158118

TITLE: The synthesis of  $\beta$ -heteroaryl amino- $\alpha,\beta$ -dehydro- $\alpha$ -amino acid derivatives via thiazolones

AUTHOR(S): Smodis, Janez; Stanovnik, Branko; Tisler, Miha  
CORPORATE SOURCE: Dep. Chem., Univ. Liubljana, Liubljana, 61000,

slovenia

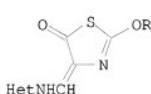
SOURCE: Journal of Heterocyclic Chemistry (1994), 31(1), 199-203

CODEN: JHTCAD; ISSN: 0022-152X

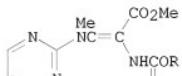
DOCUMENT TYPE: Journal

DOCUMENT TYPE: Journal  
LANGUAGE: English

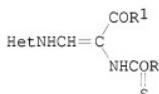
87



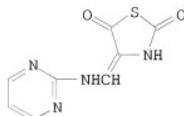
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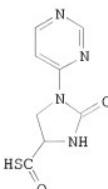
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11



13



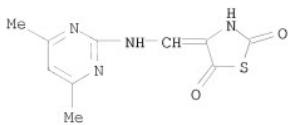
V

AB 2-Alkoxy-4-heteroarylaminomethylene-5(4H)-thiazolones I (Het = 4,6-dimethyl-2-pyrimidyl; R = Me, Ch2Ph, Et; Het = 4-methyl-2-pyrimidyl, R = Me) were converted with various nucleophiles into  $\beta$ -heteroarylamino- $\alpha,\beta$ -dehydro  $\alpha$ -amino acid derivs. II (R = Me, CH2Ph), III (Het = 4,6-dimethyl-2-pyrimidyl, R = Me, Ch2Ph, Et, R1 = OMe; Het = 4-methyl-2-pyrimidyl, R = Me, R1 = OMe; Het = 4,6-dimethyl-2-pyrimidyl; R = Me, Ch2Ph, R1 = NH2; Het = 4,6-dimethyl-2-pyrimidyl, R = Me, R1 = NHMe2; Het = 4,6-dimethyl-2-pyrimidyl, R = CH2Ph; R1 = NHHN2), and peptide derivative III' (Het = 4,6-dimethyl-2-pyrimidyl; R = Me, R1 = NHCH2CO2H). Reduction of I with sodium borohydride in EtOH saturated with gaseous ammonia afforded the corresponding  $\beta$ -heteroarylamino substituted alanyl amides HetNHCH2CH(COHNH2)NHC(S)OR. Thiazoledione derivative IV was transformed with sodium methoxide in methanol into imidazol-1(3H)-one V.

IT 157423-82-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and rearrangement of, to imidazole derivative)  
RN 157423-82-0 CAPLUS  
CN 2,5-Thiazolidinedione, 4-[(4,6-dimethyl-2-pyrimidinyl)amino]methylene]-  
4CS INDEX\_NAMCA



ACCESSION NUMBER: 1961:137436 CAPLUS

DOCUMENT NUMBER: 55:137436

ORIGINAL REFERENCE NO.: 55:25919g-i,25920a-h

TITLE: Action of Grignard reagents. XXII. Action of organo-magnesium compounds on 2-thioxo-4-arylidene-5-thiazolidones and on 4-arylidene-2,5-thiazolidinediones. Reaction of 2-thioxo-4-benzylidene-5-thiazolidone with diazomethane

AUTHOR(S): Mustafa, Ahmed; Sallam, Mohamed Mohamed

CORPORATE SOURCE: Cairo Univ., Giza, Egypt

SOURCE: Journal of Organic Chemistry (1961), 26, 1782-6

CODEN: JOCZAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

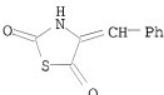
GI For diagram(s), see printed CA Issue.

AB Treatment of 2-thioxo-4-arylidene-5-thiazolidones with organomagnesium compds. did not effect the opening of the heterocyclic N ring, but only addition to the conjugation created by attachment of an exocyclic double bond in the 4-position took place to give colorless products, believed to have the general structure ArCHRCH.CO.S.CS.NH. 2-Thioxo-4-diphenylmethyl-5-thiazolidone (I) was also obtained by the addition of C<sub>6</sub>H<sub>6</sub> to the exocyclic double bond in 2-thioxo-4-benzylidene-5-thiazolidone (II) in the presence of anhydrous AlCl<sub>3</sub>. Hydrolysis of the Grignard products, ArCHRCH.CO.S.CS.NH, exemplified by I and PhCHEtCH.CO.S.CS.NH (III), with aqueous 10% NaOH established a new route for the preparation of  $\beta,\beta$ -disubstituted alanines, namely,  $\beta,\beta$ -diphenyl- $\beta$ -ethylalanine (IV) and  $\beta$ -phenyl- $\beta$ -ethylalanine (V). Similarly, addition of organomagnesium compds. to the exocyclic double bond in the newly prepared 4-arylidene-2,5-thiazolidinediones took place with formation of colorless products, believed to have structures ArCHRCH.CO.S.CO.NH. Hydrolysis of 4-( $\alpha$ -phenylpropyl)-2,5-thiazolidinedione (VI) with aqueous NaOH gave IV. The action of ethereal CH<sub>2</sub>N<sub>2</sub> on II led to the formation of 2-methylthio-4-benzylidene-5-thiazolidone (VII) in good yield. Na (4.9 g.) in 120 ml. alc. added during 2 hrs. to 26 g. aminoacetonitrile sulfate in 150 ml. Me<sub>2</sub>CO, 17 ml. CS<sub>2</sub> and then 200 ml. Et<sub>2</sub>O added to the filtrate, the 18 g. of solid obtained dissolved in H<sub>2</sub>O, and this solution added to 300 ml. Me<sub>2</sub>CO gave 14.4 g. carbamoylmethylammonium carbamoylethiocarbamate (VIII), m. 138-9° (decomposition). VIII (1 g.) in 6 ml. H<sub>2</sub>O treated with 0.5 g. p-tolualdehyde in 3 ml. alc. and the mixture treated dropwise with 3 ml. HCl gave 0.15 g. 2-thioxo-4-(p-methylbenzylidene)-5-thiazolidone, yellow needles, m. 220-1° (C<sub>6</sub>H<sub>6</sub>). A Grignard solution (from 0.9 g. Mg and 9 g. PhBr in 50 ml. Et<sub>2</sub>O) added to 1.5 g. of each member of a series of 2-thioxo-4-arylidene-5-thiazolidones (arylidene group = PhCH<sub>2</sub>; p-MeOC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>; p-MeC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>; : CHC<sub>6</sub>H<sub>3</sub>O<sub>2</sub>CH<sub>2</sub>-3,4) in 50 ml. C<sub>6</sub>H<sub>6</sub>, the Et<sub>2</sub>O evaporated, the mixture heated 1 hr., kept 3 hrs. at room temperature, poured onto 100 ml. saturated NH<sub>4</sub>Cl containing 3 ml. HCl, extracted with C<sub>6</sub>H<sub>6</sub>, and the solvent evaporated gave solid residues, which were crystallized. The Grignard products, ArCHRCH.CO.S.CS.NH, were similarly prepared, colorless, soluble in cold 10% NaOH, no color with alc. FeCl<sub>3</sub>, generally soluble in hot C<sub>6</sub>H<sub>6</sub>, and difficultly soluble in ligoine (Ar and R or compound number, solvent of crystallization, m.p., % yield, and color with H<sub>2</sub>SO<sub>4</sub> given): I, alc., 199-200°, 76, yellow; Ph, p-tolyl, alc., 173°, 88, yellow; Ph, Me, C<sub>6</sub>H<sub>6</sub>, 170°, 82, no color; III, C<sub>6</sub>H<sub>6</sub>-ligroine, 157-8°, 79, no color; Ph, iso-Pr, C<sub>6</sub>H<sub>6</sub>, 214°, 76, no color; p-MeOC<sub>6</sub>H<sub>4</sub>, Ph, alc., 139°, 74, yellow; p-MeOC<sub>6</sub>H<sub>4</sub>, p-tolyl, C<sub>6</sub>H<sub>6</sub>, 149°, 70, orange; p-MeOC<sub>6</sub>H<sub>4</sub>, Me, C<sub>6</sub>H<sub>6</sub>-ligroine, 175°, 72, no color; p-MeOC<sub>6</sub>H<sub>4</sub>, Et, C<sub>6</sub>H<sub>6</sub>, 167°, 78, no color; p-MeOC<sub>6</sub>H<sub>4</sub>, Ph, alc., 173°, 68, yellow; C<sub>6</sub>H<sub>3</sub>O<sub>2</sub>-CH<sub>2</sub>-3,4, Ph, C<sub>6</sub>H<sub>6</sub>, 212°, 71, red;

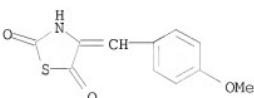
C<sub>6</sub>H<sub>3</sub>O<sub>2</sub>CH<sub>2</sub>-3, 4, p-tolyl, C<sub>6</sub>H<sub>6</sub>, 195°, 73, red; C<sub>6</sub>H<sub>3</sub>O<sub>2</sub>CH<sub>2</sub>-3, 4, Me, C<sub>6</sub>H<sub>6</sub>, 184°, 72, yellow. I (1 g.) and 10 ml. aqueous NaOH refluxed 15 min., the mixture cooled, poured on ice, and acidified gave 0.55 g. IV, m. 234-5° (decomposition); HCl salt m. 227° (decomposition). IV (0.5 g.) in 5 ml. aqueous 10% NaOH treated 15 min. with 0.4 ml. BzCl, poured on ice, acidified, the solid triturated with 3 ml. hot CC<sub>14</sub>, and crystallized gave 0.35 g. Bz derivative (IX), m. 190-1° (dilute alc.). IX (0.5 g.) and 0.3 g. fused NaOAc heated 0.5 hr. with 0.5 ml. Ac<sub>2</sub>O gave 0.15 g.  
 2-phenyl-4-diphenylmethyl-5(4H)-oxazolone, m. 158° (C<sub>6</sub>H<sub>6</sub>-ligoine).  
 III (1 g.) similarly treated with NaOH gave 0.6 g. V, m. 222-3° (decomposition). Benzoylation of V gave 0.3 g. Bz derivative, m. 193°. II (6 g.) in 200 ml. C<sub>6</sub>H<sub>6</sub> added at 10-20° to 9.5 g. AlCl<sub>3</sub> and 125 ml. C<sub>6</sub>H<sub>6</sub>, the mixture stirred 3 hrs. at room temperature, the complex decomposed with dilute HCl, extracted with C<sub>6</sub>H<sub>6</sub>, and crystallized gave 4.1 g. I. 2,5-Thiazolidinedione (5 g.), 5 ml. BzH, and 20 ml. AcOH refluxed 0.5 hr. with 3 g. fused NaOAc gave 3.2 g. 4-benzylidene-2,5-thiazolidinedione (X), m. 165° (alc.). Similarly, refluxing 5 g. 2,5-thiazolidinedione, 5 ml. p-methoxybenzaldehyde, 20 ml. AcOH, and 3 g. fused NaOAc 0.5 hr. gave 2.9 g. 4-(p-methoxybenzylidene)-2,5-thiazolidinedione (XI), m. 168° (alc.). Grignard reagents treated with X and XI gave VI and related compds. The following results were obtained (starting material, Grignard product Ar and R or compound number, solvent, m.p., % yield, and color with H<sub>2</sub>SO<sub>4</sub> given): X, VI, C<sub>6</sub>H<sub>6</sub>, 136°, 82, yellow; X, Ph, p-MeOC<sub>6</sub>H<sub>4</sub>, alc., 145°, 70, orange; X, Ph, Me, alc., 159°, 81, no color; XI, p-MeOC<sub>6</sub>H<sub>4</sub>, Me, alc., 149°, 73, no color. VI (1 g.) in 10 ml. 10% NaOH gave 0.45 g. IV. II (1 g.) in 50 ml. Et<sub>2</sub>O kept overnight at 0° with CH<sub>2</sub>N<sub>2</sub> gave 0.8 g. VII, m. 101° (ligroine).

IT 103038-18-2P, 2,5-Thiazolidinedione, 4-benzylidene-  
 103853-89-0P, 2,5-Thiazolidinedione, 4-p-methoxybenzylidene-  
 RL: PREP (Preparation)  
 (preparation of)

RN 103038-18-2 CAPLUS  
 CN 2,5-Thiazolidinedione, 4-benzylidene- (6CI) (CA INDEX NAME)



RN 103853-89-0 CAPLUS  
 CN 2,5-Thiazolidinedione, 4-p-methoxybenzylidene- (6CI) (CA INDEX NAME)



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AUTHOR(S): Aubert, Per; Jeffreys, R. A.; Knott, E. B.

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GI For diagram(s), see printed CA Issue.

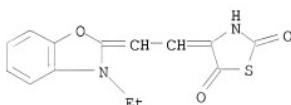
AB HO<sub>2</sub>CCH<sub>2</sub>NHCOEt (5 g.) in 15 cc. C<sub>6</sub>H<sub>6</sub>, treated with PCl<sub>3</sub> and gently warmed to about 40°, gives 75% 2,5-thiazolidinedione (I), m. 110°; the yield is the same with 2.0 or 0.33 mol. PCl<sub>3</sub> or with PBr<sub>3</sub>; the yields are lower in C<sub>6</sub>H<sub>6</sub>-dioxane. CO.CH<sub>2</sub>.N:C(OEt).S (5 g.) in 15 cc. C<sub>6</sub>H<sub>6</sub>, treated with 3 cc. PBr<sub>3</sub>, gives 2.9 g. I. 2,2'-Acetanilidovinylbenzoxazole-EtI (2.2 g.) in 150 cc. EtOH, treated at 30° with 0.5 cc. Et<sub>3</sub>N and 0.6 g. I, and kept 2 days, gives [2-(3-ethylbenzoxazole)]{4-(2,5-thiazolidinedione)}dimethinemercocyanine (II), orange, m. 248°; if the components in 10 cc. EtOH are boiled 15 min., the yellow solution becomes deep crimson and gives a sepia dye, m. 257°, which is II plus 1 mol. EtOH. I (1 g.) in 15 cc. H<sub>2</sub>O, heated 1 min. on the steam bath, give a polyglycine, amorphous, darkens about 300°. MeCH(NH<sub>2</sub>)CO<sub>2</sub>H (20.8 g.) and 12.1 g. KOH in 40 cc. H<sub>2</sub>O, treated with 35 g. EtOCS<sub>2</sub>Et in 40 cc. EtOH and heated 24 hrs. on the steam bath, give 21 g. N-thionocarbethoxy-DL-alanine, m. 103.5°; sarcosine (5 g.) gives 9.5 g. N-thionocarbethoxysarcosine, m. 86°; these compds. on cyclodealkylation give oils.

IT 854163-58-9P, 2,5-Thiazolidinedione, 4-[2-(3-ethyl-2-benzoxazolinylidene)ethylidene]- 854163-59-0P, Benzoxazole, 2-[2-(2,5-dioxo-4-thiazolidinylidene)ethylidene]-3-ethyl-, compound with EtOH

RL: PREP (Preparation)  
(preparation of)

RN 854163-58-9 CAPLUS

CN INDEX NAME NOT YET ASSIGNED



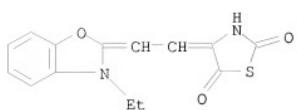
RN 854163-59-0 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 854163-58-9

CMF C14 H12 N2 O3 S



CM 2

CRN 64-17-5  
CMF C2 H6 O

H<sub>3</sub>C—CH<sub>2</sub>—OH

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L2 0 S L1  
L3 10 S L1 FULL

L4 FILE 'CAPLUS' ENTERED AT 10:02:13 ON 17 APR 2008  
5 S L3 FULL

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